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| Rev | Date | Description | Edited by | Approvals |
|---|---|---|---|---|
| A | 20110601 | lssue | | **Prepared:** |
| | | | | **XIAO XI. G** |
| | | | | **Checked:** |
| | | | | **LILIU** |
| | | | | **Approved:** |
| | | | | **ZH.G MIN** |

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## 1. Scope:

This specification covers the requirements for product performance, test methods and quality assurance provisions of **2.54 Female Header Connectors Series .**

## 2. Shape,Construction and Dimensions:

See attached drawing

## 3. Materials

See attached drawing

## 4. Accmmodated cable and P.C.Board

4.1 Thickness:0.8(.031") ~1.6mm(.063")

4.2 P.C.Board Layout:See attacjed drawings

## 5. Rating:

| | | |
|---|---|---|
| A | Current | 3 A |
| B | Temperature | -40°C ~+105°C |

## 6. Product Performance and Requirements:

| Electrical Performance | | |
|---|---|---|
| Test Description | Test Procedures & Condition | Requirements |
| Temperature Rise vs Current Rating<br>（额定电流&温升测试） | EIA 364-70<br>Measure temperature rise vs current at 0.5Aminimum when measured at an ambient temperature of 23±3°C. | The ΔT shall not exceed +30°C at any point in the connector under test. |
| Contact Resistance | EIA 364-23<br>Subject mated contacts assembled in housing to closed circuit current of 100 mA maximum at open circuit at 20 mV maximum. | 20 mΩ maximum |
| Insulation Resistance | EIA 364-21<br>Measure by applying test potential between the adjacent contacts, and between the contacts and ground in the mated connector assemblies.<br>Test Voltage: 600V DC. | 1000MΩ minimum |
| Dielectric Withstanding Voltage | EIA 364-20<br>Measure by applying test potential between the adjacent contacts, and between the contacts and ground in the mated connector assemblies.<br>Test Potential: 600V AC at sea level<br>Test Duration: 60 seconds | 1. No flashover, No spark over, No excess leakage, No breakdown.<br>2. Current leakage: < 0.5mA |

| Mechanical Performance | | |
|---|---|---|
| Test Description | Test Procedures & Condition | Requirements |
| Flammability | UL 94V-0<br>This procedure is to ensure thermoplastic resin compliance to UL flammability standards. | The manufacturer will require its thermoplastic resin vendor to supply a detailed C of C with each resin shipment. The C of C shall clearly show the resin's UL listing number, lot |

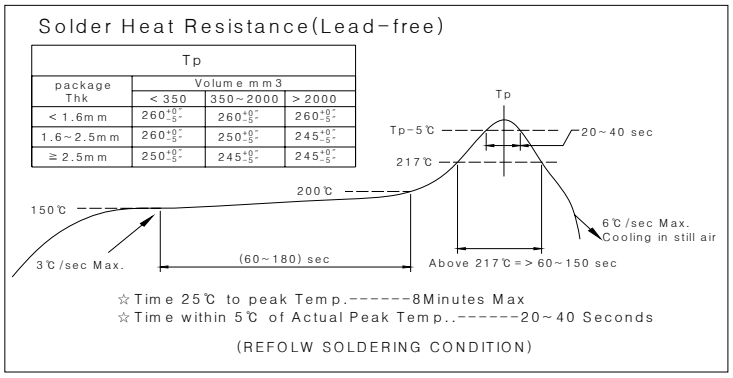
| | | |
|---|---|---|
| | | number, date code, et cetera. |
| Contact retaining in insulator | Retention speed 25±3mm per minute form housing | More than<br>800 gram |
| Single contact insertion fore | Measure force to withdrawal using 0.46mm square pin at speed 25±3mm per minute | 800 gram max |
| Single contact withdrawal force | Measure force to withdrawal using 0.46mm square pin at speed 25±3mm per minute | 30 gram max |
| Vibration | 1.5 mm 10 - 55 - 10HZ/minte each<br>2 hours for X,Y and Z directions | ppearance: No danmage<br>D iscontinuity:I micro secpmd ,max |
| Solder ability<br>（沾锡性） | EIA 364-52<br>Subject unmated connectors should be tested according to the condition listed below:<br>Steam Aging Temperature: 90 ~ 96°C<br>Steam Aging Duration: 8 hours±5 min.<br>Soldering Temperature: 260±5°C<br>Soldering Time: 4 ~ 5 seconds<br>Flux: Inactivated | Continuous solder coating with a minimum 95% coverage. |
| Resistance to Soldering Heat | EIA 364-56<br>Condition B<br>Subject unmated connectors should be tested according to the condition listed below:<br>Insulator:PA46/PA6T/LCP<br>DIP Type :<br>Soldering time:5±0.5 seconds<br>Soldering pot:260±5 °C<br>SMT Type :<br>Soldering time:5±0.5 seconds<br>Soldering pot:250~260°C<br>Insulator:PBT<br>Soldering time:5±0.5 seconds<br>Soldering pot:230°C | No damage. |

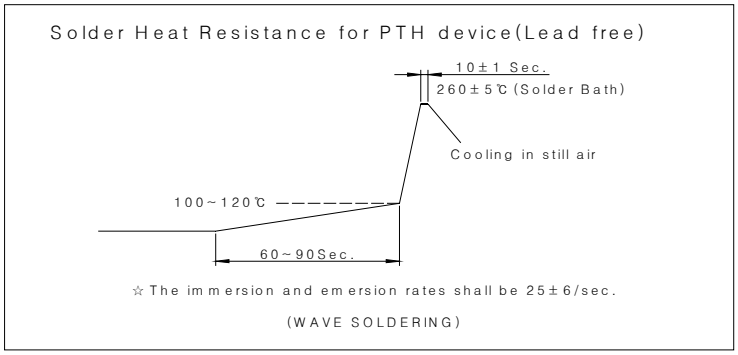
| Environmental Performance | | |
|---|---|---|
| Test Description | Test Procedures & Condition | Requirements |
| Temperature Life | A 364-17 Test Condition 3 Method A<br>The object of this test is to detail a standard test method to assess the ability of a connector to withstand elevated temperatures with or without electrical loading.<br>Subject mated connectors should be tested according to the condition listed below :<br>Temperature : 105±2°C<br>Duration : 96 hours | 1. No evidence of damage.<br>2. The electrical performances should meet the spec. specified. |
| Salt Spray | EIA 364-26<br>Subject mated and unmated connectors should be tested according to the condition listed below:<br>Temperature: 35±3°C<br>Humidity: 95 ~ 98% (R.H.)<br>PH Value: 6.5 ~ 7.2<br>Duration: 48 hours | 1. No evidence of damage.<br>2. The electrical performances should meet the spec. Specified. |

**Soldering Condition:**

**Reflow soldering**

Lead-Free-IPC / IPC-STD-020C



## Wave Soldering

Lead-Free-JESD22-B106C-Lead-free